PATENT COUPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER See Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.			
International application No.	International filing date		(Earliest) Priority Date (day/month/year)	
PCT/KR03/00062	13 JANUARY 2003		24 DECEMBER 2002 (24.12.2002)	
Applicant		(13.01.2003)	24 DECEMBER 2002 (24.12.2002)	
	•			
HAN, LackSu				
This International search report has been pre to Article 18. A copy is being transmitted to	pared by this Internationa the International Bureau.	l Searching Authori	ty and is transmitted to the applicant according	
This international search report consists of a	total of 2 she	eets.	•	
It is also accompanied by a co			ort.	
1. Basis of the report	ternational coords was as			
language in which it was filed, unle	ss otherwise indicated uni	der this item.	is of the international application in the	
the international search was car Authority (Rule 23.1(b)).	rried out on the basis of a	translation of the int	ternational application furnished to this	
b. With regard to any nucleotide and was carried out on the basis of the	/or amino acid sequence	disclosed in the inte	ernational application, the international search	
contained in the international		•	n isa-	
filed together with the internal			•	
furnished subsequently to this		•		
furnished subsequently to this	· ·			
L	enlty furnished written se		not go beyond the disclosure in the	
		readable form is ide	entical to the written sequence listing has been	
2. Certain claims were found u	nsearchable (See Box I).			
3. Unity of invention is lacking	· · · · · · · · · · · · · · · · · · ·			
4. With regard to the title,				
the text is approved as submitt	ed by the applicant.			
the text has been established by	y this Authority to read a	s follows:	·	
5. With regard to the abstract,		٠		
The state of the s			•	
X the text is approved as submitt				
			s it appears in Box III. The applicant may,	
			, submit comments to this Authority.	
6. The figure of the drawing to be pub		Figure No.	2	
as suggested by the applicant.			None of the figures	
because the applicant failed to				
because this figure better chara	cterizes the invention.	•		

International application No.

PCT/KR03/00062

A.	CLASSIFICATION	OF	SUBJECT	MATTER
----	----------------	----	---------	--------

IPC7 F04B 15/02

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 F04B15/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched KR, JP: IPC as above

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR99-78553 A(HAN, LACKSU) 05. NOV 1999 🚁	/i-6, 8-15
Y 5	KR169203 U(JUNG, KUN HWA) 15. FEB 2000	1-6, 8-15
A	JKR99-64370 A(HAN, LACK SU) 05. AUG 1999	1, 13
1 1 1	JP08-170585 A(MITSUBISHI MATERIALS CORP) 02. JUL 1996	1, 13
A	JP06-257563 A(NIIGATA ENG CO LTD , NIIGATA KENKI KK) 13. SEP 1994	1, 13
A	JP 06-213143 A(NIIGATA KENKI KK , HITACHI TOOL ENG LTD) 02. AUG 1994	1, 13
A	KR96-23354 U(DAEWOO HEAVY INDUSTRY LTD) 20. JUL 1996	1, 13
A	JP01-267372 A(KAWASAKI HEAVY IND LTD) 25. OCT 1989	1
	÷	

Further documents are listed in the continuation of Box C.

See patent family annex.

- Special categories of cited documents:
- document defining the general state of the art which is not considered to be of particular relevance
- earlier application or patent but published on or after the international
- document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- document referring to an oral disclosure, use, exhibition or other
- document published prior to the international filing date but later than the priority date claimed
- later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- document member of the same patent family

Date of the actual completion of the international search

18 SEPTEMBER 2003 (18.09.2003)

Date of mailing of the international search report

18 SEPTEMBER 2003 (18.09.2003)

Name and mailing address of the ISA/KR



はなる場合は

Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

KIM, Sung Nam

Authorized offices

